#/ Supplement/to FER-4

June 29, 1976

The following information has been received in recent months and is evaluated here in light of the data previously presented in FER-4, dated March 18, 1976:

4. <u>List of references:</u>

- n) Gary S. Rasmussen and Associates, June 21, 1974, Engineering geology report for Parcels 3 and 4 of Tentative Parcel Map no. 958,

 Loma Linda: unpublished consulting report, 6 p., 2 trench logs.
- o) Woodward-Lundgren and Associates, October 10, 1972, Letter to
 University Realty (re seismic refraction survey) 2 p.
- p) James E. Slosson, June 11, 1976, Letter to Earl Hart (re observations of Loma Linda fault at hospital site, southeast corner Barton and Benton), 2 p.

5. Summary of available data:

According to James E. Slosson (1976), a sand-filled fracture in alluvium was observed in the foundation excavations of the Heritage General Hospital site. Slosson interpreted this as evidence of the location of the Loma Linda fault. He states that the fault does not cut "soil" (topsoil horizon?).

Leighton and Associates (1971) make no mention of the above feature in their evaluation of the Heritage General Hospital site even though excavation cuts were examined and exploratory trenches were located to reveal any NW-trending faults through the site.

The letter-report of Woodward-Lundgren (1972) refers to a seismic refraction anomaly at a depth of 120 feet, 300 feet northeast of Benton

and Lawton in Tract 9120. Earth Sciences Associates (1972) made a resistivity survey across this tract, but was unable to verify this anomaly as being a near surface feature. Additional trenching by Rasmussen (1974) failed to reveal any faulting on Tract 9120 (same as parcels 3 and 4), south of the hospital site. Even if the seismic refraction anomaly is a fault, there is no indication of surface or near-surface faulting. The feature observed by Slosson does not align with the Woodward-Lundgren anomaly and apparently is spatically unrelated.

It is added here that the report by Price and Shea (1976) mislocates several trench and geophysical traverse sites (e.g. those discussed above). Other than summarizing the investigations carried out todate, it contributes no new information that would evaluate the location or existence of the Loma Linda fault.

- 8. <u>Conclusions</u>: Notwithstanding the observations of Slosson and the errors in the Shea and Price summary, the references (b to p) cited strongly indicate the absence of recent (Holocene) surface or near-surface faulting in the vicinity of the Loma Linda fault. The observations of Slosson, which tend to cloud those conclusions, must remain unresolved unless further exploratory data becomes available. In weighing the expectation of new data against the conclusion that the Loma Linda fault does not exist as a through-going active surface feature, the preponderance of weight must be given to the latter.
- 9. Recommendations: No change, unless new information becomes available. Deleting the Special Studies Zone around the Loma Linda fault, based on the data at hand, is considered to be a prudent action as long as one realizes that identification of all active faults is not within the realm of possibility.

Earl W. Hart 6/79/16

